

Claims

What is claimed is:

1. Light-refracting, color-enhancing compositions for applying coatings to a substrate, comprising a mixture of (a) pelletized rubber and (b) transparent or translucent glass plastic beads having a diameter up to about 70μ and (c) a resinous binder material which cures to form a hard, translucent, light-refracting paint layer.

2. A coating composition according to claim 1 in which the beads have a maximum diameter within the range of about 10 to 20 microns.

3. A coating composition according to claim 2 in which the maximum diameter is between 12 and 18 microns.

4. A coating composition according to claim 1 in which the beads are clear glass and have a refractive index between about 1.5 and 2.5.

5. A coating composition according to claim 4 in which the refractive index is between about 1.9 and 2.1.

6. A coating composition according to claim 4 in which the glass beads comprise a mixture of beads having different refractive indexes.

7. A coating composition according to claim 1 in which the pelletized rubber particles have a diameter up to about 150μ .

8. A coating composition according to claim 1 in which the pelletized rubber content is between about 2% and 40% by weight.

9. A coating composition according to claim 1 in which the binder material comprises a mixture of a pre-polymer having reactive sites, and a poly-functional cross-linking agent which is reactive with said sites to cure the binder material.

10. A coating composition according to claim 1 in which the resinous binder material contains a volatile solvent or vehicle which is evaporated to dry the coating below the baking temperature of the paint composition.

11. A coating composition according to claim 10 in which the volatile solvent is an organic solvent, and the coating composition has a solids content above about 60%.

12. A coating composition according to claim 10 in which the volatile vehicle is water.

13. A coating composition according to claim 1 in which the glass bead content is between about 10-20% by weight of the composition.

14. Process for applying a light-refractive, color-enhancing coating to a substrate comprising the steps of (1) spraying said substrate with a coating composition comprising (a) at least 2% by weight of pelletized rubber and (b) at least about 10% by weight of transparent or translucent glass beads having a diameter up to about 70 μ and (c) a curable resinous binder material; (2) heating the coating, if necessary to evaporate any volatile

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solvent or vehicle, and (3) drying the coating to cure the resinous binder material and form a light-refracting coating containing the pelletized rubber and the glass beads which refract, scatter and dissipate applied light within the cured coating and which is firmly bonded to said substrate.

15. Process according to claim 14 in which the pelletized rubber particles have a diameter up to about 150 microns.

16. Process according to claim 14 in which the pelletized rubber content is up to about 40% by weight of the solids content.

17. Process according to claim 14 in which the pelletized rubber content is between about 5% and 20% by weight of the solids content.

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